AAIB Bulletin No: 8/93 Ref: EW/G93/06/02 Category: 2c

Aircraft Type and Registration: | Bell 206B JetRanger III, G-BNIT

No & Type of Engines: 1 Allison 250-C20 turboshaft engines

Year of Manufacture: 1971

Date & Time (UTC): 3 June 1993 at approximately 1300 hrs

Location: Fordoun, near Stonehaven, Aberdeenshire

Type of Flight: Public Transport

Persons on Board: Crew - 1 Passengers - 2

Injuries: Crew - Serious Passengers - 1 Serious

1 Minor

Nature of Damage: Aircraft destroyed

Commander's Licence: Airline Transport Pilot's Licence (Helicopters)

Commander's Age: 34 years

Commander's Flying Experience: 3,900 hours (of which 1,800 were on type)

Last 90 Days - 179 hours Last 28 Days - 65 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and

telephone inquiries by the AAIB

The helicopter was operating a contract flight so that employees of an electricity generating and distribution organisation might carry out a survey of their power transmission cables. For this purpose the helicopter had been temporarily based at a private facility at Newall Farm, which is about 5 nm south of Aberdeen. An uneventful survey flight had been carried out from this base during the morning of 3 June 1993 and the accident flight was the second of that day. Weather conditions were fine, with visibility in excess of 10 km and a south easterly wind of between 5 and 10 kt.

The helicopter took off from Newall Farm at about 1235 hrs to carry out the second survey flight. It had been airborne for about 1 hour and 25 minutes when it was positioning to survey an area north of Fordoun where several power lines converged. During this manoeuvre the helicopter's main rotor blades struck a 275 kVA power transmission cable and the aircraft immediately dived and struck the ground. The pilot and electricity board employee who were in the front seats sustained serious injuries as a result of the ground impact. The employee in the rear of the helicopter, although suffering from

shock, was able to render assistance in the subsequent resue operation when all the occupants were transferred to hospital in Aberdeen.

Neither the pilot nor his passengers has any clear recollection of the events immediately prior to the collision with the cables. There were some important safety features that enabled them to survive this accident. All occupants were restrained by full safety harnesses which held during the impact sequence. In addition all occupants were wearing flame proof flying clothing and protective helmets. The pilot suffered severe head injuries during the impact and there is no doubt that the protective helmet saved him from fatal injury.